



ZERO BEAT

HCRA's 75th Anniversary - 1948 - 2023!

Meeting Update!

The Holyoke Hospital has opened its meeting room to us once again. Beginning in 2022, in-person meetings are back!

Need directions?

[hcra.org/meeting-location](http://www.hcra.org/meeting-location)

April 2023

From the editor,

Here we are on April Fools Day as I type this, we've had some nice warm days and still some snow and rain, but hopefully, Mother Nature isn't playing any April Fool's jokes on us!

There is no shortage of information in this issue of Zero Beat. One great source of info is the Nuts & Volts column beginning on [page 18](#)!

Bill, W1FMX, has written the 4th and final installment of his "Restoring a Boat Anchor" series. Next time you see Bill at any HCRA club functions, please take a minute to say thank you for all the work he puts into his articles!

This month has many things going on, including the Big Raffle drawing, which will be held at the April 7th meeting. Get your raffle tickets before or during the meeting, which begins at 7:30 pm. The results will be announced at the meeting, so make sure you attend so you can take your Geochron home with you.

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[Page 17](#) has the Monday evening 10-meter net transcript as an example of what one of our nets is like. It's always fun and informative, geared toward our newest hams. Watch for announcements regarding the net topics on the Reflector or Facebook. Also, there's a fantastic "Show Your Shack," by Fred, N1DPM, on [page 12](#).

Can you take a few photos of your shack and write down a some details about your radios, antennas, etc.? Contact me at kd1ku@arrl.net with any questions or to submit photos. It's up to you if you would like to see this series continue. It doesn't matter if you only have one radio in your shack; it's how you use it that we would all love to see!

73, Ken - KD1KU

Friday April 7th

In-Person "Show and Tell" Meeting!

The April meeting is far from normal! To begin, it's the one and only "Show and Tell" meeting where members show their projects for a chance to win prizes! The drawing for the Big Raffle will be held at this meeting. See [page 9](#) for complete details. Meeting begins at 7:30 pm; doors open at 7 pm.

Regular club meetings are held at the Holyoke Medical Center Auxiliary Conference Center at 575 Beech Street, Holyoke, MA, 01040.

Need directions? Click <http://www.hcra.org/meeting-location/>



Upcoming Meetings and Guest Speakers

| | | |
|---|---|--|
|  September 2022 |  | Tim Duffy, K3LR will be our September guest speaker. Tim is from the K3LR SuperStation in West Middlesex, PA. Don't miss his presentation! |
|  October 2022 |  | This month's guest speaker is Rockwell, WW1X, who will be presenting and demonstrating Remote Ham Radio in-person from the Holyoke Hospital |
|  November 2022 |  | HCRA's Annual Auction is Back at the November Meeting! Ham Radio Gear and Related Accessories ONLY! NO Computers, Monitors or PC Parts! |
|  December 2022 |  | The Annual HCRA Holiday Party at The Steaming Tender Restaurant Dec 5th. Join us for a Night of Great Food and Fun with your Fellow Hams. |
|  January 2023 |  | Tim Carter, W3ATB is giving a presentation on the New England Forrest Road Rally LIVE & in-person! Tim is responsible for the communications involving 45 hams & more. Info at https://newenglandforestrally.com |
|  February 2023 |  | Tom Vinson, NYOV will be giving a virtual presentation on his involvement in a special expedition tracing the path of Amelia Earhart and to replicate the radio communications that were in use at that time! |
|  March 2023 |  | Guest Speaker Fred Kemmerer, AB10C with a special presentation about his "Adventures In Bora Bora" DX'ing from the South Pacific. |
|  April 2023 |  | Show and Tell is back... Enter your projects and win cool prizes! This is always one of the most popular & interesting meetings. The Raffle drawing for the Geochron will be held at this meeting. |
|  May 2023 | | Attention HCRA Members! Bring and demonstrate your POTA, SOTA, and QRP rigs to the May meeting. Win a 3Ah LiPo battery and charger. Perfect for portable use! Attendees get a free entry, must be in attendance to win. |
|  June 2023 | | 2023 Elections, Field Day prep & more. Consider running for a Board of Directors position. Plus, virtual guest speaker Adrian Zeffert, AB2IX with tips from the test bench, Solving common issues with simple test equipment. |



SHARE THE KNOWLEDGE MEETINGS

STK Zoom Meeting Schedule for 2023

All 2023 Share the Knowledge Zoom Meetings have been Excellent!

Once again, Larry, W1AST has worked extremely hard to find and host these exciting presentations!

If you have a suggestion for a topic or would like to give a presentation contact Larry at w1ast@arrl.net

| | | | |
|---------------------|---|--------------------------------------|--|
| January 10th - 7pm | <i>Everything About a DX Marathon</i> | By Mark, WC3W | |
| January 17th - 7pm | <i>All About Reverse Beacons & What They Do</i> | By Peter Smith, N4ZR | |
| January 24th - 7pm | <i>9 Band DXCC on a Small Lot with Wires</i> | By Mark, KE1IU | |
| February 21st - 7pm | <i>Basic Tools in the Shack New Radio Amateurs</i> | By Bob, K1YO | |
| February 28th - 7pm | <i>NanoVNA & Tiny SA - How to use them!</i> | By Bob, K1YO | |
| March 14th - 7pm | <i>A Modern Guide to Radio Teletype (RTTY)</i> | By Juergen, NV1Q | |
| March 28th - 7pm | <i>The YLRL (Young Ladies Radio League)</i> | By Barbara, KC1KGS & Anne, WB1ARU | |
| April 11th - 7pm | <i>All About the ARRL and You!</i> | By Ray, AA1SE | |

<https://us02web.zoom.us/j/88265213992?pwd=N2piU1dCUndyZ0IBbFh6QjA0TjVnQT09>

1948 ~ 2023 75 Years as an ARRL Affiliated Club

Share The Knowledge Video Library



All of the 2023 STK meetings presented so far have been uploaded to hcra.org & YouTube. If you missed any of these informative meetings, simply click the link below to view them.

<https://www.youtube.com/@HampdenCountyRA/videos>

FROM THE PRESIDENT'S SHACK

BY LARRY KRAINSON, W1AST



April 2023

The April 7th meeting is the annual Show and Tell meeting. It's one of the most enjoyable meetings of the year as members of the club stand up and show their latest kits and projects and explain to you all what they are. Questions are answered, and it frequently piques the interest of others to build the same or a similar project. It's always great fun, and you can win great prizes too.

To participate, you show a project you have completed in the past year or have not shown to the club in the past. It can be something simple or something complex; it's totally up to you. It does not have to be something special. In the past, we have had all sorts of things shown, from antennas to tower building projects to transceivers to Morse code keys to portable power to anything you can imagine. I hope you will participate this year.

This year, Show and Tell is only in person. So come and join us.

At my home shack, my preferred mode is CW or SSB. But while I sit here working, I run FT8 or another digital mode. I can let it run as I glance at it every now and then and work a new station. Because it does not require a lot of interaction on my part, it's easy to operate and still fun to make new contacts.

So many people are on FT8 across the world; if you are not on, you are missing out. But FT8 is not for everyone. It's not exciting and does not require much interaction. But you can make some good contacts with it.

Just this morning I worked Cyprus, Azerbaijan, Uzbekistan, and another. All ATNOs (All Time New Ones) for me. So there was some excitement!

Volunteers On The Air, aka VOTA. Have you been participating? It's easy. Just make contacts. LoTW (Logbook of The World) will do the rest as you upload your contacts. If you are an ARRL member, you're worth one point. An ARRL Life Member is worth 2 points; QSL Card Checkers are worth 5 points (some are in the club); an ARRL Diamond Club Member is worth 25 points (some are in the club also); an Affiliated Club Coordinator (as I am the WMA ACC), work me for 30 points; Assistant Section Managers aka ASM (also some in this club) are worth 35 points; a Section Manager aka SM for WMA or anywhere. For WMA, if you work Ray, AA1SE, he is worth 175 points. You can find all this and much more on the VOTA pages at the ARRL.org website. (<https://vota.arrl.org/>)

Massachusetts will be activated for VOTA between April 12 and 18th. I hope everyone tries to work us, as 20 hams from across the state activate and try to work as many people as possible. Will you be one of them? I hope to hear you on the air.

Join the ARRL or renew your ARRL membership. Do this through the HCRA, and the club earns a commission. But ONLY if you do so through the club. Ken, KD1KU, has posted the special ARRL membership form on page x that needs to be filled out and also the directions for doing so. As a new member, you will help the club earn \$15. As a renewing ARRL member, the club will earn \$5.

Here is the application form:

http://www.arrl.org/files/file/Clubs/2022_Affiliated_Club_Membership_Application.pdf

Continued on page 5



FROM THE PRESIDENT'S SHACK CONT'D

Why not help your club and let it benefit from your ARRL membership?

I'm ready for some warmer weather. While I enjoy sitting in the sun in my car and working HF from a parking lot, I am looking forward to pulling into a parking spot somewhere and sitting outside, working HF outdoors in the warm air, working portable off the tailgate of my truck, or on a picnic table. I do this occasionally between clients or on my lunch break. I'm not into the cold weather and have no capacity to sit out in the cold and make contacts.

Have you been on the air lately? Back in January Faye and I spend a few days in Portland, Maine in a hotel. We were on the 3rd floor and I brought a small, portable HF station. I set up the antenna on the heater, next to a window and was hearing cw on 20 meters.

I figured the odds were heavily against me to work anyone with 3 watts and the antenna inside the hotel. But work I did. A station in Virginia heard my flea power signal. He gave me a 449 signal report, but even that was good enough for a 15-minute rag chew QSO.

Juergen, NV1Q, is using a loop antenna in his HOA-restricted new home. He is working the world! It doesn't take much. You don't need an amp to have fun and make contacts. If you have a Technician Class license, you can be on 10 meter SSB and make tons of contacts. You can be any license class and thoroughly enjoy the improving band conditions.

If you do not have the means to get on the air yourself, just ask any of your friends, and we will help you. I frequently have guests over to operate my station. New hams leave with big smiles on their faces as the fun of making contacts on HF has been revealed to them.

I know I have made contacts with 10 or 20 watts, thinking I had my amp on but did not, and made the contact. Yes, I do have a beam, but I often run my end fed with those 10 or 20 watts, and that antenna performs very well. It very often surprises me how well it performs.

Get on HF and have some real ham radio fun!!!

It's not too early to start thinking about joining the HCRA board. In June, there will be elections, and there is always room for a new volunteer. Take a look here: <http://www.hcra.org/by-laws> and let us know which position you would like to volunteer for. These are the club bylaws, which explain what is expected of each person on the board of directors.

If you are interested in a position, please contact Larry, W1AST, or anyone on the board to let them know. A few of us on the board have been on it for a while now, and new volunteers are always welcome.

Continued on page 6

The March Meeting is on the HCRA YouTube Channel

Last months meeting featured guest speaker Fred Kemmerer, AB1OC, who spoke about his Dxpedition to Bora Bora! Beautiful doesn't begin to describe it! The video is on our YouTube Channel. You can view it here: <https://www.youtube.com/watch?v=epo0xT5TPac> or you can watch it on <http://www.hcra.org/2023/03/12/dxing-from-bora-bora-march-2023-meeting/>

FROM THE PRESIDENT'S SHACK CONT'D

Field Day is also in June, but it is at the end of June. Last year we had the smallest Field Day turnout that I can remember. We had a smaller number of Friday helpers, barely any radio ops, and an even smaller turnout of volunteers to help us tear down. One of the best results from last year's FD was meeting Josue, KP4JLD, and having him join the club; he has also since joined the Board of Directors.

While the high heat of Sunday taking down Field Day bothered us all, Josue was in his element, enjoying the sun and hot weather without being bothered by the heat. But even with his help, we didn't leave the park until nearly 6:00 pm Sunday.

We are looking for volunteers for this year's Field Day. These are the positions that need to be filled for Field Day to happen:

- Organizer
- Antennas and Tower Chairman
- Food Chairman
- Safety Person
- Station Manager

Whoever steps up as the organizer, I will send you the spreadsheet that I have used in past years to track everyone and every position. I have stepped down as the Field Day organizer. It's time for someone new.

Chris, W1TRK, has been the antenna and tower chairman for the past few years. Last year, Ez, W1AEZ, did a phenomenal job as Food Chairman. But there is no guarantee that these people will return again this year.

Field Day weekend is a favorite activity for so many people. It's a great place for experienced hams and newbies to get together and make the event happen. Think about volunteering for one of the above positions. We can use your help!

We need YOUR help to make Field Day a success this year. We need YOU to volunteer!

There are more activities going on that I will discuss next month.

73,

Larry, W1AST
HCRA President
w1ast@arrl.net

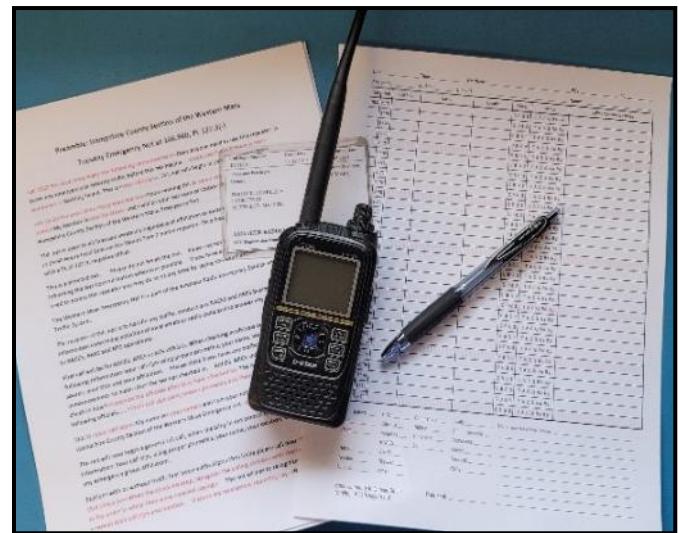
ARES NET UPDATE

WMA ARES Nets & More by Smitty, KC1IKA, ASEC Net Manager

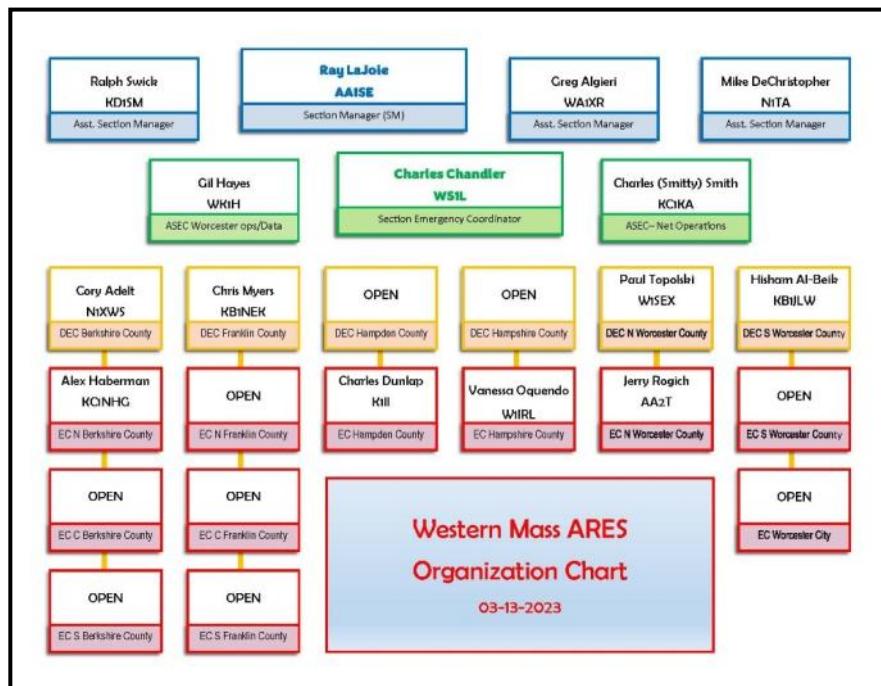


Greetings all. By the time you read this, we may have had our biggest nor'easter of the season. This type of event emphasizes why we have Skywarn and ARES volunteers. Please see the article in this newsletter supplied by our new ARES SEC, Chuck Chandler, WS1L. It goes into the ARES database and explains how to register or update your information.

If you registered in the past and didn't hear anything from us, it's because the database was great for getting information in but not so great for us to get information out. The updated system will help us communicate a lot more effectively and keep everyone who signs up more involved. I know some of you were frustrated; it frustrated us as well. So check out the new ARES Member Registration System and add, verify, or update your information. If you have issues signing in, follow the instructions in Chuck's article.



As I mentioned in the last article, I have created an organizational chart of the Western Mass ARES appointments (below). This chart does not include all the section staff, and I will be working on a future version that does include everyone. With this chart, I wanted to emphasize who you would go to in your county if you have questions or are a new ARES member. You should start at the EC level and work your way up. For more information on the staff members, go to <https://wma.arrl.org/>, where you can find all the information about current issues as well as sign up to become an ARES member.



Continued on page 8

ARES NET UPDATE CONT'D

WMA ARES Nets & More by Smitty, KC1IKA, ASEC Net Manager



The past few weeks have been a challenge for ARES and Skywarn with all the snow storms. The storm we had on March 13, 14, and 15 was a joint effort of the Berkshire area ARES and Skywarn coordinating with the Albany, NY, National Weather Service office as well as the 146.940 Skywarn nets coordinating with the Boston, MA, office.

The 146.940 repeater was used for 19 Skywarn nets, with 111 reports taken. One of these reports was from Rowe, where 39" of snow went onto the national news. My thanks and appreciation go to all those involved, from the stations that called in reports to all the net controllers who assisted in taking reports and forwarding them to the appropriate weather office. The system worked!

This was also a good test for my ham shack. On the 14th, I had my ID-5100 powered up from 0530 to 2230 and was involved in 15 nets running on battery power. I only used 20 amp hours out of my 50-amp-hour main battery and had another 150 amp hours in reserve capacity.

Again, thanks to all those involved! 73,

Smitty, KC1IKA

ASEC, Net Manager, WMA ARES, Skywarn Net Coordinator

Why should you attend the April HCRA Show and Tell Meeting?

The April HCRA Show and Tell Meeting is a great opportunity to learn about new technologies, see what other members are working on, and share your own projects. It's also a great way to meet other people who are interested in amateur radio.

Here are some reasons why you should attend the April HCRA Show and Tell Meeting:

Learn about new technologies

The show and tell is a great way to see what other members are working on and learn about new technologies. You might even be inspired to try a new project yourself.

See what other members are working on

The show and tell is a great way to see what other members are working on. You might be surprised by what you see, and you might even get some ideas for your own projects.

Share your own projects

The show and tell is a great way to share your own projects with other members. You might even get some feedback on how to improve your projects.

Meet other people who are interested in amateur radio

The show and tell is a great way to meet other people who are interested in amateur radio. You might even make some new friends.

If you're interested in amateur radio, the April HCRA Show and Tell Meeting is a great event to attend. You're sure to learn something new, see some cool projects, and meet some interesting people.



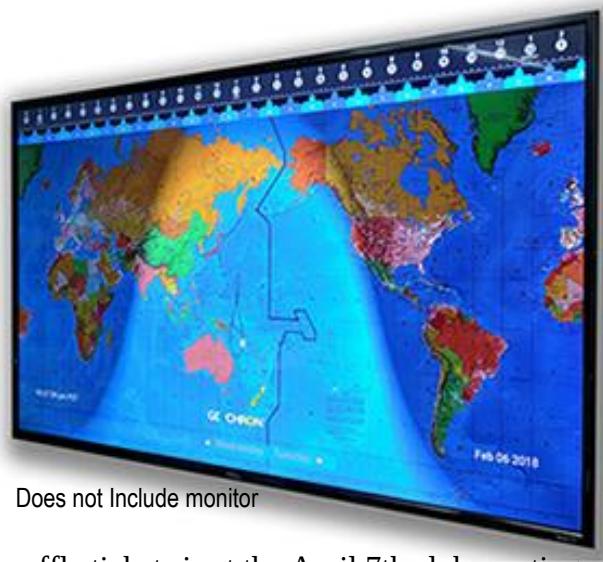
LAST CHANCE TO GET BIG RAFFLE TICKETS

Drawing is Now Being Held at the April Club Meeting!

The HCRA Big Raffle drawing was NOT held at the MTARA Hamfest because of the low turnout due to bad weather. Tickets will be available until (and at) the April 7th meeting. Get your tickets from HCRA board members or online at hcra.org using the donate button (add \$2 to cover postage and PayPal fees). Tickets are only \$10 each, so buy several and be sure to attend the April 7th meeting!

- ◆ Tickets are only \$10 each so get yours at the April meeting!
- ◆ Prize: Geochron Atlas 4k (Monitor not included) Plus a \$300 Gift Certificate to Best Buy
- ◆ The drawing is now being held at the HCRA meeting on April 7th. Plan on attending!
- ◆ Cutoff date for online ticket sales is April 5th at Midnight
- ◆ The final chance to get tickets is at the April 7th meeting! Get your tickets from any HCRA board members at or before the meeting

Inspired by our Geochron mechanical world clocks, the Geochron Digital 4k is a high-resolution display in the digital world. Five map sets are overlaid by intricate patterns of human activity and a live layer of the current position of the International Space Station. Use location pins to label important places and switch time zones on the fly.



Does not include monitor



Last chance to buy raffle tickets is at the April 7th club meeting where the raffle drawing will be held. Tickets can be obtained from Larry, W1AST, at w1ast@arrl.net, or from any board members.

If you're in the South Hadley/Chicopee/Holyoke area, I have tickets at my QTH. Email me at kd1ku@arrl.net to arrange a day and time to stop by and pick up one or more tickets.

Online ticket sales end on April 5th at midnight!

**Don't Wait, Get Your Tickets Today!
The Drawing is April 7th at the HCRA Meeting**

ARES DATABASE UPDATE

Introducing the New WMA ARES Membership Database by Chuck, WS1L



The Western Massachusetts Section has restarted the former Amateur Radio Emergency Service (ARES) membership database. This database was in use up until 2019 or 2020 and contains records going back at least to 2013. We are in the process of cleaning up the membership records, and we are urging every ARES member in the WMA section to log in or create a new record and make sure we have your information up to date.

To update or create a new membership record, visit <https://wma.arrl.org/> and look for the Emergency Communications entry on the banner:



Let your mouse pointer rest there and you will see a drop-down set of choices. Pick the one called "ARES MEMBER REGISTRATION SYSTEM"



Let your mouse pointer rest there, and you will see a drop-down set of choices. Pick the one called "ARES MEMBER REGISTRATION SYSTEM."

Continued on page 11



ARES DATABASE UPDATE CONT'D

Introducing the New WMA ARES Membership Database by Chuck, WS1L



Western Massachusetts ARRL Section Amateur Radio Emergency Service (ARES) Member Login

[Home](#) [New Application](#) [Member Login](#) [WMA ARES](#) [Privacy Policy](#) [Site Information](#)

| | | |
|-----------|----------------------|--------------------------------------|
| Callsign: | <input type="text"/> | <input type="button" value="Login"/> |
| Password: | <input type="text"/> | <input type="button" value="Clear"/> |

Access to the information in this site is restricted to Western Massachusetts ARRL Section registered members only.
All accesses are logged.

If you have forgotten your password, click [here](#).

If you already have a password from prior use, it should still work. If not, there is a link to reset your password, but it requires that you have access to the email you used when you first registered. If you cannot access an existing registration, email either Gil, WK1H, gilwk1h@gmail.com, or myself, Chuck WS1L, chandlerusm@gmail.com, and we will get you reset.

If you have never registered with this database, you will need to create a new record. You will find that this database has fields for a lot of data to record your equipment, availability, and training. Please be as thorough as possible, as the information provided is valuable when we need to match abilities with needs.

Even if you already have an existing record, please take a few moments to update all your information so that we have the most up-to-date records possible. Every ARES member should update their information once a year so that we are able to accurately assign resources to their needs.

Many thanks for being a part of ARES!

73 de Chuck, WS1L
WMA SEC



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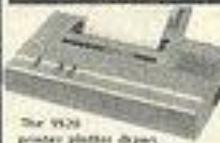
MULTIPACK 2: Visible Solar System, Jupiter Lander & Le Masse

MULTIPACK 3: Visible Solar System, Lazarus & Sea Wolf

MULTIPACK 4: Jupiter Lander, Clowns & Lazarus

MULTIPACK 5: Jupiter Lander, Omega Race & Clowns

Commodore 1520 PRINTER - PLOTTER



The 1520 printer plots down to 4 colours, and prints characters and numbers.

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COMMODORE 1526 PRINTER



Superb Dot Matrix (near letter quality printer)

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Advan Chatterbox ... £49.95

Stonechip 16K switchable RAM ... £34.95

Turn the page for more super offers from Spectrum . . .

SHOW YOUR SHACK!

This Month's Featured Shack is that of Fred, N1DPM

This month's featured shack belongs to Fred, N1DPM, who has been a ham since 1978. Fred has been very active the whole time (mostly on VHF/UHF and microwave), and he's been building and honing his shack into what you see here today—constant improvement!

Below and on the following pages are several photos and descriptions to go along with each photo. It's easy to see how this "Share Your Shack" could be a dozen pages long, but I hope all readers will enjoy the condensed version.

The photo on the right is an overview of Fred's shack, which features his operating position plus a full-tilt workbench, not to mention a well-stocked parts and accessories area on the right side.



Photo #1 is how Fred gets the feed-lines and control cables into the basement. He replaced a basement window in the back with a piece of 0.125-inch thick aluminum and put bulkhead connectors on it for the feed-lines and 2 multi-pin plastic connectors for the rotator and control cables for both the 80' tower and the EME tower. This panel is bonded to the station/house ground system.



Continued on page 13

SHOW YOUR SHACK!

CONT'D

This Month's Featured Shack is that of Fred, N1DPM

Photo #2 shows all of the RF bulkhead feed throughs are type N. They are nice because they are waterproof on the outside, but being threaded, they are a pain to connect and disconnect from the inside. The two that are low power, EME RX and 160m RX, have adapters to BNC, which makes connecting and disconnecting very easy.

Since Fred runs a kW on all bands, he can't use the BNCs on the other feedlines, so Fred searched and found (pretty rare) Type C connectors and adapters. These are basically a BNC with a type HN (high voltage N) center pin to handle power.

This solves the connect and disconnect issue on these feedlines.



Photo #3

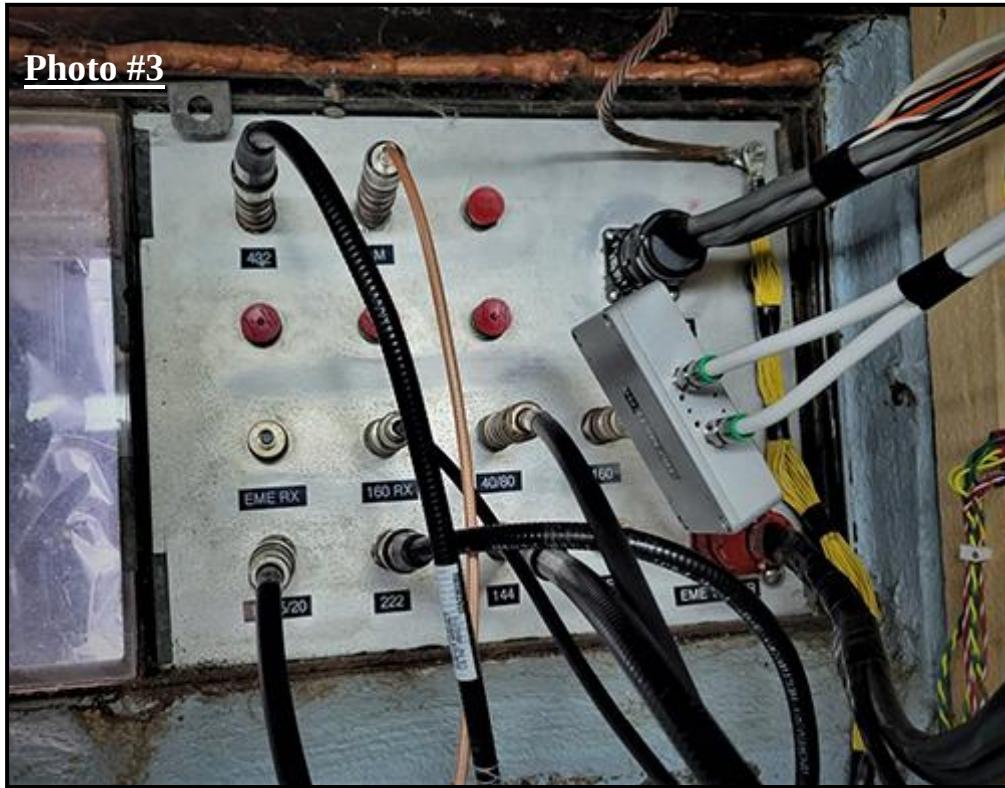


Photo #3 shows what it looks like all hooked up.

You can see the ground bonding on the inside in the upper right.

There is also a ground plug that, when he disconnects the control cables from the 80' tower, can be inserted to tie all of these lines to the plate.

This is the yellow harness hanging from the ground stud.

Continued on page 14

SHOW YOUR SHACK!

CONT'D

This Month's Featured Shack is that of Fred, N1DPM

Photo #4 right next to the antenna connection panel in that side of the basement is a set of shelves that hold the power supply and amplifiers for VHF and UHF. The top shelf is the dual 48-volt switching supply (with about 50 amps total capability) for the amplifiers. All the amplifiers are 50-volt LDMOS-based and all homebrew. The next shelf down from left to right has the 432MHz cavity GaAsFET LNA (silver vertical tube), and next to it is the 432MHz kW amplifier. It's a pair of BLF888A FETS in parallel. Land the copper piece laying next to that is the 2-meter homebrew cavity GaAs FET LNA. The next shelf down is the 222 MHz station. Left to right: DCI helical resonator bandpass filter for receive. On the rear connector is a HEMPT MMIC LNA. The next grey box is a 12-volt Astron power supply to power the 222 transverter. The beige and black box is the 222 NEWS / KH6CP / W1VT 222 transverter to convert to 10 meters. On the gold heatsink is the 222 MHz KW amplifier. This is a single MRF6VP1K25H LDMOS FET. The next shelf down houses the 6 meter (on the left) and 2 meter (on the right) kW's. Both of these are BLF188XR LDMOS FETs. The shelves below that are for storage. This is nice having the amplifiers on the other side of the basement, as they are all air cooled, and the fans on four amplifiers and two power supplies are a bit noisy. These all live over there next to the oil furnace, so a little fan noise there doesn't bother it.

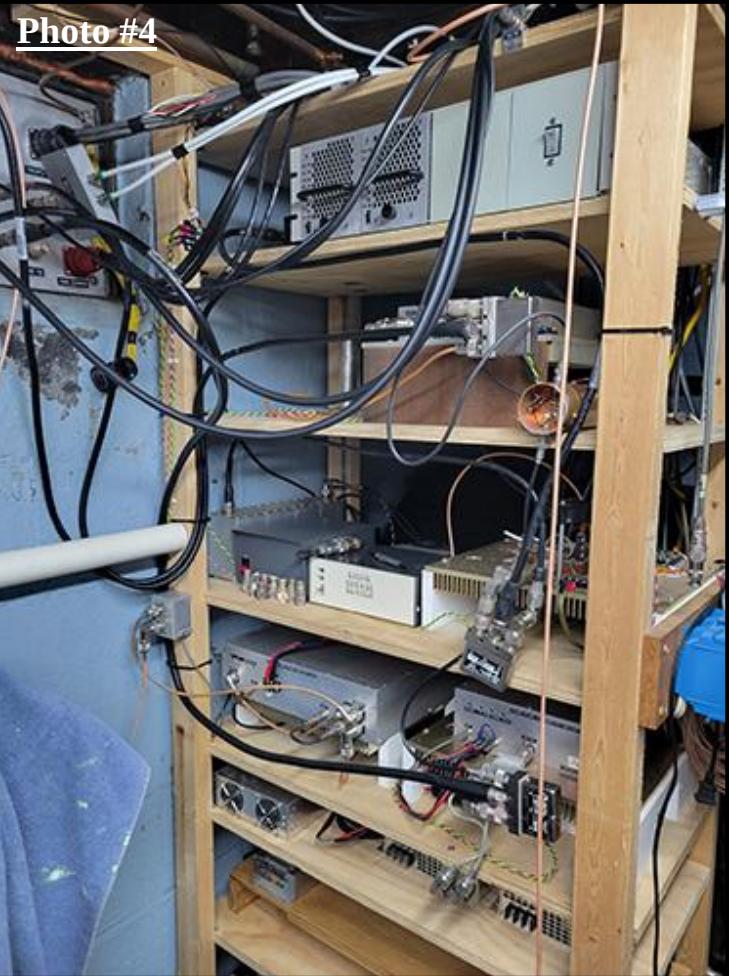


Photo #5



Photo #5 shows the operating desk in Fred's shack. The HF station is on the left. With a Kenwood TS870S for a rig. The shelf below (actually the desktop) has the bencher paddle, a Presonus tube microphone preamp, and an An-comm Clear Speech audio DSP noise reduction unit, as well as his headphones (Sennheiser HD280PRO). Above the rig is a tube headphone amplifier for when he's contesting on HF. The combination of the Clear Speech and the smooth-sounding tube headphone amplifier makes listening very comfortable and

Continued on page 15

SHOW YOUR SHACK!

CONT'D

This Month's Featured Shack is that of Fred, N1DPM

Non-fatiguing for long operating periods. The HF station speaker is next to the Autek Research WM-1 wattmeter and SWR meter. The silver box on the upper left is a 160-meter receive bandpass filter. This is used on the 160m RX antennas, which are a shielded coax loop antenna and two (one east, one west) EWEs. Behind the headphone amplifier is an Advanced Receiver Research preamp for the 160-meter antennas. The HF microphone on the boom is a MXL990 large-diameter condenser recording studio quality microphone. This is fed to the Presonus tube mic preamp mentioned earlier, then onto the TS870. The center section consists of the Kenwood TL922 amplifier, and the white panel is the HF antenna switch to choose between 160M, 80/40M, and 20/15/10 meters. The silver box next to that allows switching between the three different 160-meter RX antennas. On the right is the VHF and UHF rig, a Yaesu FT847. Below that is the rotator control for the 80-foot tower. It is a ProSisTel PST51. Next to that is the LNA T/R sequencer for this station. This ensures the preamps are switched out and back in, as well as T/R relays switched and amplifiers keyed and unkeyed, all in the proper order and timing. Also there is the Bencher CW paddle and the station mic for VHF and UHF, a D104 that was reworked with a Heil HC5 mic cartridge in it. Above that is another Ancomm Clear Speech DSP processor for RX. The top shelf, from left to right, has the EME rotor controls for azimuth and elevation, followed by the 2-meter watt meter (forward and reverse) on the bottom. Above the elevation rotator control is the 6-meter watt meter. The dual meter box to the right is the voltage and current meter for the power supply used on the VHF and UHF amplifiers, and above that are the 222 and 432 watt meters. On the shelf below the table is the station computer (a Dell I-7) and the 12 volt station power supply (a Meanwell 30 amp switching supply).

Photo #6 The tower is 80 feet (roughly) of Rohn 25 with three sets of guy wires. The ProSisTel PST51 rotator is located right at the top set of guys, so all of the torque that can be transferred to the guys is. The mast is 24 foot long 2 inch diameter 1/4 inch wall 6061-T6 aluminum.

There's approximately 16 feet of mast above the top of the tower. Antennas from top to bottom are: an 18-element LFA Yagi for 432 MHz, a 12-element LFA Yagi for 222 MHz, a 9-element LFA Yagi for 2 meters, and a 6-element LFA Yagi for 6 meters.

These antennas were all homebrewed to the dimensions on the G0KSC web site. The tribander has been coined the A5-DPM (by WA1T)... This is a Cushcraft A4S that I added an extra boom section to make it a 24 foot boom and also added a 10 meter director to make it 4 elements on 10 meters. All of the feedlines for these antennas are 1/2-inch and 7/8-inch Heliax hardline.

Not shown in the picture are the 160-meter 1/2 sloper and the 80/40-meter trapped 1/2 sloper wires.



Continued on page 16

SHOW YOUR SHACK!

CONT'D

This Month's Featured Shack is that of Fred, N1DPM



Photos #7a, #7b, and #7c: These photos show each of these 160-meter receive antennas. Photo #7b and #7c show Fred's 160 meter receive only antennas which are difficult to see in the photo

Photo #8: Shows Fred's array for 2-meter EME. It's 4x9-element LFA Yagis (same as on the 80-foot tower for 2 meters).

73, Fred, N1DPM



Want to see your shack in Zero Beat? Simply take a few photo's of your shack, antennas and whatever else you'd like to show your HCRA friends. It doesn't matter whether you have one radio or a dozen please share them with everyone else. To submit your shack email: kd1ku@arrl.net

10-METER NET

The Following is a Transcript of a Recent 10m Net Topic



This is a brief transcript of the topic and subsequent answers provided by net participants during a recent Monday evening net. Each Monday evening, the HCRA hosts a 10-meter net at 7 pm on 28.375Mhz. The nets come with a topic for net participants to comment on. Reminders are posted on the Reflector email list and on the Facebook group a few days in advance of the net!

With the 10-meter band openings getting better with each day that passes, we've had North Carolina stations and last week we had a check-in from HCRA member Bill, W5JAZ, in Texas formerly from Connecticut!

The topic for this 10 meter net was "**What short bit of advice would you give to a new ham?**"

- ◆ **Learn CW**
- ◆ **Join a local club or clubs**
- ◆ **Find a mentor to ask questions of and to learn from their firsthand experience**
- ◆ **Attend Field Day and experience everything from start to finish**
- ◆ **Participate in a contest - maybe with your mentor**
- ◆ **Don't let one bad apple ruin your ham radio experience if you run across one; that's not what ham radio is about!**
- ◆ **Get on the local nets on VHF / UHF to get over your mic shyness**
- ◆ **Get on HF and experience real ham radio fun, talking all over the world**
- ◆ **Attend foxhunts and club events to meet like-minded people**
- ◆ **Build kits and wire antennas, then put them into use**
- ◆ **Attend conventions/expositions and forums to learn more about our hobby**
- ◆ **Have fun and enjoy your newfound hobby!**

Participants on this net were:

Larry, W1AST, George, KC1V, Ken, KD1KU, Randy, KC1PBQ, Larry, KD1RV, Brian, KC1ONA and Fred, N1DPM

Not only is the 10-meter net very informative, but it's also a whole lotta fun! What better way to have a good time and teach our newest hams in the process?

If you have nothing going on next Monday evening at 7 pm local time, why not join us on 28.375 MHz and have some fun on a Monday night? Who knows? You might get hooked after trying it once!

I hope to see some new faces on next Monday's 10-meter net. Give it a try... you might enjoy it!

NUTS AND VOLTS

ARRL & HCRA News Plus Odds & Ends & Other Worthy Items!



Wanted! Helpers for Website & YouTube

Like all other support functions of the club, the website is kept up-to-date by volunteer work. Your membership dues are used in part to pay for keeping the hcra.com domain registered and to pay the company that hosts the site. The hosting company does not update any content on the site.

Since about 2018, Vanessa, W1IRL, has been volunteering to update the site. W1IRL also established the club's YouTube channel and edits and uploads all videos to the site.

We are looking for 1 or 2 additional volunteers to ensure more than one person can update the site. That is part of any basic continuity of operations plan. W1IRL will teach the volunteers how to update the site and the YouTube channel. The immediate need is for at least a second person to learn how to keep the website up-to-date. Interested members should contact Vanessa at: webmaster@hcra.org

Notice: Webmaster will be away in May

Attention HCRA members. Our webmaster, Vanessa, W1IRL, will be away for the entire month of May for a very well-deserved vacation. If you submit any posts, comments, or videos, they will not be uploaded to hcra.org until her return. This is another reason Vanessa needs someone to help her with website updates and YouTube video editing and publishing! Enjoy your vacation, Vanessa! [Editor]

2023 Field Day Notice

Field Day is June 24–25, so it's time to begin planning. In order for the HCRA to hold a Field Day in 2023, someone needs to volunteer to organize it! Larry has done this for several years, so it's time for someone else to take charge. Also needed are a tower person and a lead for the Saturday evening meal.

HCRA needs volunteers to put it all together and take it all down on Sunday! Last year, the number of volunteers was shameful, so let's make 2023 better! Contact Larry for details: w1ast@arrl.net

Can You Help Teach A Tech Class?

Ray, AA1SE, your WMA Section Manager is looking for volunteers to help teach a Technician license class in early 2023. These classes will be virtual and taught via Zoom, not an in-person class.

Help Ray and many others as well as all those new licensees! VE's & HCRA members are welcome. If you can help Ray, contact him at the info below, don't forget to mention you're a HCRA member!

Ray, AA1SE at ray.aa1se@gmail.com

Western Massachusetts Section News: <https://wma.arrl.org>

ARRL New England Division: <https://nediv.arrl.org>

ARRL Western Massachusetts Section Manager - Raymond P. Lajoie, AA1SE - aa1se@arrl.org

To learn more about an ARRL membership, and how it can help you - <http://www.arrl.org/membership>



NUTS AND VOLTS CONT'D

ARRL & HCRA News and Miscellaneous News Worthy Items!



Spring NEAR-Fest Date Change

NEAR-Fest XXXIII will be held on April 28th and 29th, 2023, and not on its traditional date, which has always been the first weekend in May ever since 2007. NEAR-Fest XXXIV, scheduled for October 13th and 14th, 2023, is NOT affected.

The Deerfield Fair Association informed me that they booked two events, the NH Farm, Forest, and Garden Show and the NH Arabian Horse Ass'n Show, at the fairgrounds for May 5th and 6th, 2023. We apologize for any inconvenience that this may cause anyone.

Mike Crestohl, W1RC

HCRA Needs your Call Signs

HCRA President Larry, W1AST, has come up with something very cool, but he needs your help, provided you have more than one callsign, that is. Have you changed your call from your original FCC-assigned call sign to what you have now?

Example: I used to be WB1DBY, and I'm now W1AST. If you can help, please use the following contact. Larry, W1AST, at w1ast@arrl.net

Worked All HCRA Award

Larry, W1AST has been working on this for some time now but he believed 2023 was a better fit. Why? 2023 is the year the club becomes 75 years old! HCRA has been associated with the ARRL for 75 years. The goal is to work 10 different HCRA members on HF in any mode and on any band. Submit your log to w1ast@arrl.net and earn a commemorative certificate celebrating our 75th anniversary!

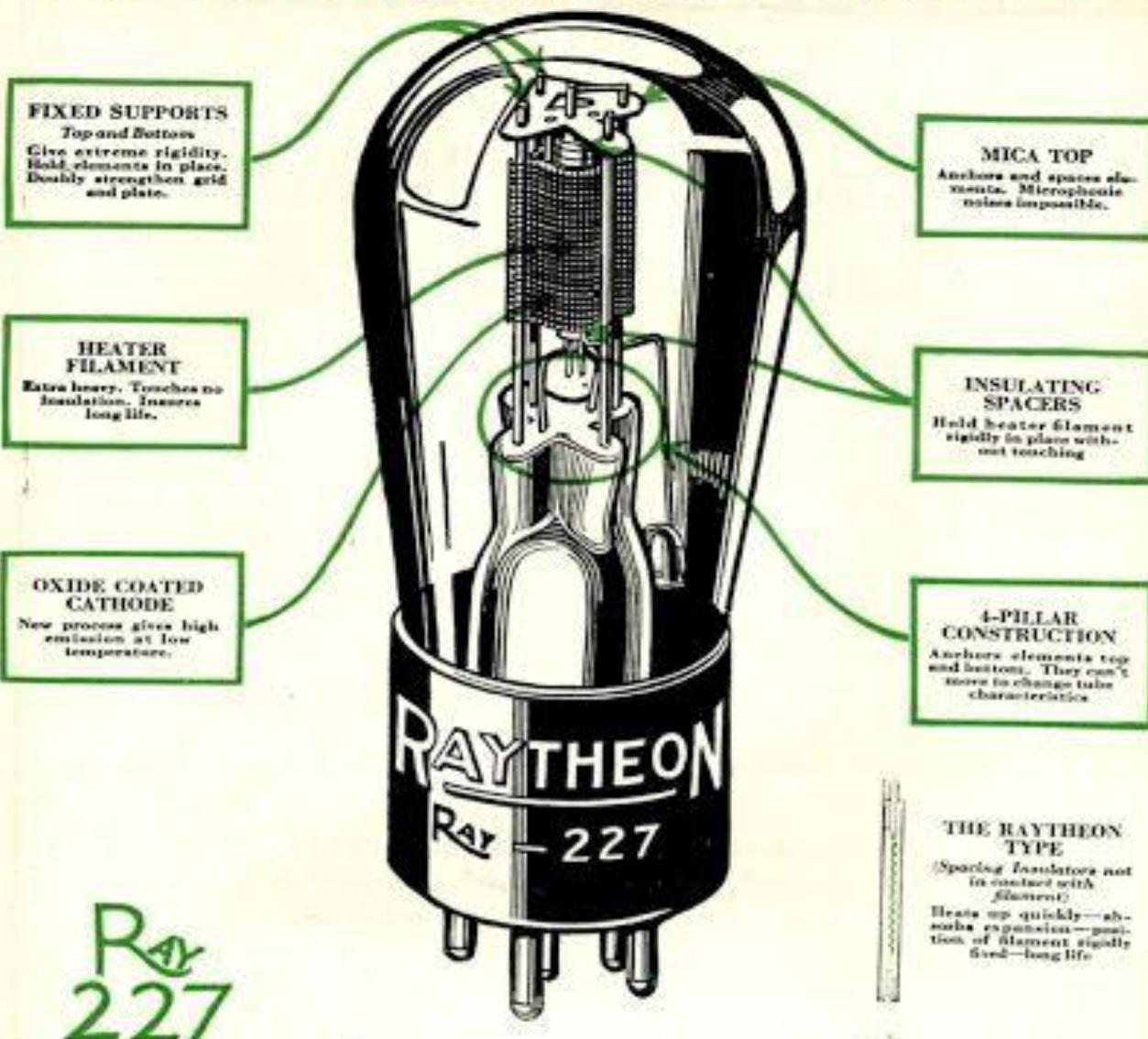
This only runs through 2023, and is a little something special for our 75th year! January 1st through December 31st 2023, this is one of many special HCRA activities!

Western Mass VE Team Resumes Exams!

I am pleased to announce that the Western Mass VE Team (WMVET) has been granted the opportunity to resume VE sessions at the Holyoke Hospital Auxiliary Conference Room. Beginning January 27th and every 4th Friday in 2023, we have scheduled 6 pm, and two hours of use of the hall to perform VE exams.

I would ask that you pass this information along to anyone who can benefit or would like to volunteer to be an examiner on these dates. We will need to have at least 2 others to assist on these dates, or I will have to cancel that session. You can e-mail me at w1fab@arrl.net or call or text 413-575-2950 if you are able to assist. 73, David Cote -W1FAB-

Why Raytheon Tubes are "HEALTHY"



Ray
227

The performance and life of a radio tube are largely governed by the maintenance of the pre-determined fixed position of the elements to each other. When the elements (filament, grid and plate) are shifted—due to weak mechanical construction or vibration in shipment—the life of the tube is frequently shortened by as much as 75%.

Unlike any and all other radio tubes, the relative positions of all the elements are permanently maintained in Raytheon tubes and the fragility has been conquered and eliminated. Raytheon tubes cost you no more and by longer life, they should reduce your maintenance cost by one-half. And—most important of all—their performance never varies.

Raytheon
LONG LIFE RADIO TUBES

RAYTHEON MANUFACTURING COMPANY, Cambridge, Mass.

THE RAYTHEON TYPE

(Spacing Insulators not in contact with filament)

Heats up quickly—absorbs expansion—position of filament rigidly fixed—long life

FLOATING FILAMENT TYPE

(No Spacing Insulator): Quick heating—but heater often touches Cathode causing burn-out or HUM. Position of filament not rigidly fixed

COVERED FILAMENT TYPE

(Spacing Insulator in contact with full length of filament)

Slow heating—but insulation wears out filament. Short life

“BOAT ANCHORS”

Getting a “Boat Anchor” Back On the Air - By Bill, W1FMX (Part IV)

Now that we have discussed different aspects of getting a Boat Anchor back on the air, perhaps you have decided to give one a try. If so, then let's discuss some strategies for buying one and restoring it.

Do you recall that Indiana Jones movie with the one scene with an old knight who tells Indiana Jones to "Choose wisely!" when he selects the grail? Well, the same is true about getting a Boat Anchor. First, there is the decision about the brand: will it be a brand that made kits or one that sold assembled items? Secondly, what is the condition of the item? Then, decide which radio or radios you want to have.

If you decide to buy a radio that was sold in kit form, there are many advantages. First, there is usually a good manual available that will help you understand how the radio works and how it was put together. Heathkit, for example, also included a troubleshooting section that is very useful. Kits were often designed for novice hams, so some transmitters (e.g., a Heath DX-60) or receivers (e.g., a Heath HR-10) are pretty basic designs, and there is much information available about them, both in written form and in YouTube videos on topics such as servicing these items. The real problems with kits are caused by: (1) builder mistakes or poor craftsmanship like cold solder joints; or (2) modifications done by the original or later owners. It is sometimes a challenge to identify modifications and correct them (if necessary). If you did select a kit-built radio and ran into an insurmountable problem, there are repairmen who specialize in these type of radios. Heathkits, for example, has RTO Electronics (<http://rtoham.com>) which is a respected service and sales company.

Commercially sold radios are usually well made and don't generally present the problems that kits do. Manuals are available, but they usually do not present the type of information that makes working on a kit easier. Also, component placement may be such that accessibility is a problem. There are videos available explaining how to work on some radios, such as old Collins rigs, but the person who does this needs a high level of technical skill. So, if getting an old radio is a new venture for you, it would be useful to carefully consider whether you could work on it other than doing basic maintenance like replacing tubes. One option would be to buy one that has already been updated with new electrolytic capacitors and had failing components replaced.

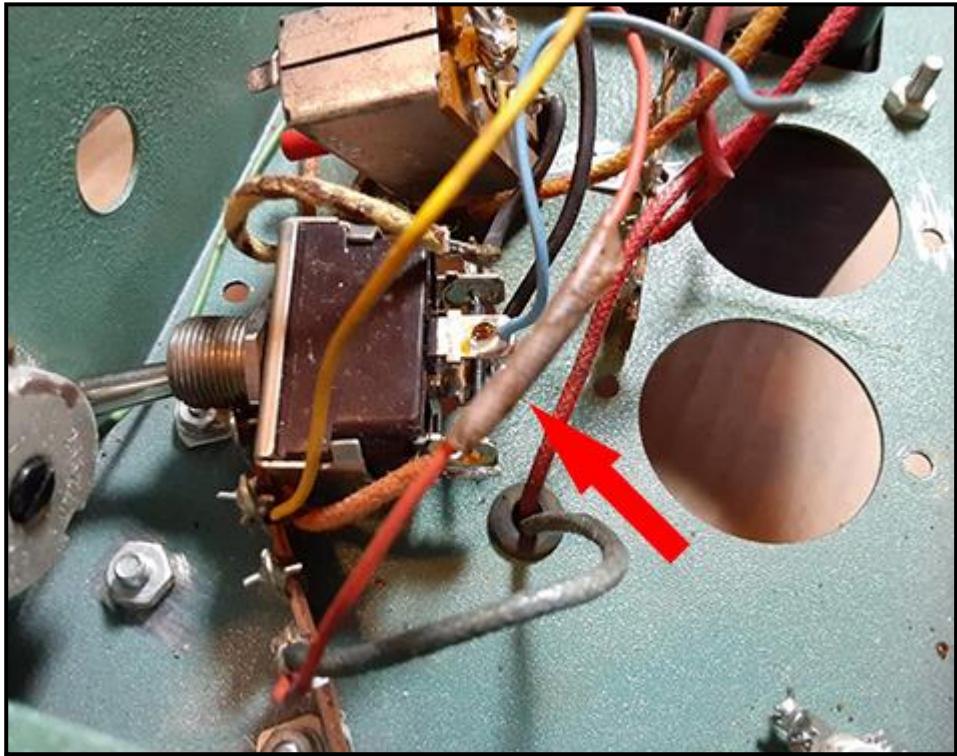


Photo 1: Band-aid on wire covering broken insulation in Heathkit HP-23 power supply

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“BOAT ANCHORS” CONT'D

Getting a “Boat Anchor” Back On the Air - By Bill, W1FMX (Part IV)

There are experts who work on these radios who do sell ones that they have serviced. For example, if you decided to buy a Drake transceiver, there is the repairman, WB4HFN (<http://www.wb4hfn.com/Services/WB4HFN/RepairHomePage.htm>), who is well-known and respected for the quality of his work. A good source of information about the quality of repair companies can be found by looking at websites devoted to user groups for the various brands of radios.

Buying an old radio is really best done in person so you can really see what you would be getting. Being able to ask about the history of the radio is helpful. Also, seeing the condition of the cabinet, chassis, and components will allow you to see whether the radio has been well cared for or haphazardly stored. If there appears to be damage from moisture, it is better to stay away from that radio as you get started. If you buy your radio online, a careful study of the seller's posted pictures can be an effective way to evaluate a radio. Photos should show the condition of the cabinet, front panel/controls, and the upper and lower parts of the chassis with clear views of circuit boards and components. Since photos can be enlarged, a careful review of the enlarged images is needed. Check the solder joints to see how well they are done, examine the wiring to see if it looks neat, and see if there have been any "improvements." But, of course, there may be things that are not visible in the photo. Also important if you buy a radio from a distant seller is to see how it will be packed and shipped. When care is not taken in packing, the radio could be damaged, with the tubes jostled and thrown out of their sockets, or other components may be ruined.

With your new radio in hand, it is best to take your time getting it on the air. First, get a manual and study it carefully. Look online for videos and articles about that radio, then do a thorough inspection. Look at things like the power cord—has it deteriorated? A good idea is to add a 3-conductor grounded power cord for safety. Look at the tubes; check them for their condition using a tube tester, as well as cleaning the pins and sockets as needed. Also, do resistance checks on the transformer before powering up the unit. Cleaning the chassis at this point is also a good idea, as it will help reveal any flaws that might need attention.

The best way to power up the radio is to use a Variac, a variable transformer (sold at Hamfests or new at Amazon starting around \$50), and to use it by starting with a low voltage, for example, maybe 40 volts. Let it go for a while, then increase the voltage slowly until the standard level of household voltage (e.g., 120 V A.C.) is achieved; this slow process of applying power can "reform" the electrolytic capacitors in the unit. However, I would still recommend changing them out anyway. If you don't have access to a Variac, keep in mind that powering up an old radio that has not been used in some time can damage it; for example, some components could fail immediately, and those failures could then damage the transformer, which could be difficult and expensive to replace. If you see or smell smoke, observe sparks, etc., you must disconnect the power immediately.



Photo 2: Heathkit DX-60 Transmitter with new power cord and fuse holder

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“BOAT ANCHORS” CONT'D

Getting a “Boat Anchor” Back On the Air - By Bill, W1FMX (Part IV)

In my experience, I have found that it is worth the expense of replacing tubes that are very weak (though sometimes weak tubes can function quite adequately), electrolytic capacitors, old paper capacitors, and resistors that are more than 15% above the specified value. Changing the power cord is something that I do each time as well. Cleaning tube sockets and spraying potentiometers with DeOxit is something I typically do, too. With radios that have printed circuit boards, it is useful to clean up the ground connection between the boards and the chassis (I simply loosen the screws/nuts holding the boards and use alcohol to wipe the contact surfaces and re-tighten the boards down). Look for cold solder joints; it may even be worth your time to “touch up” each solder joint.

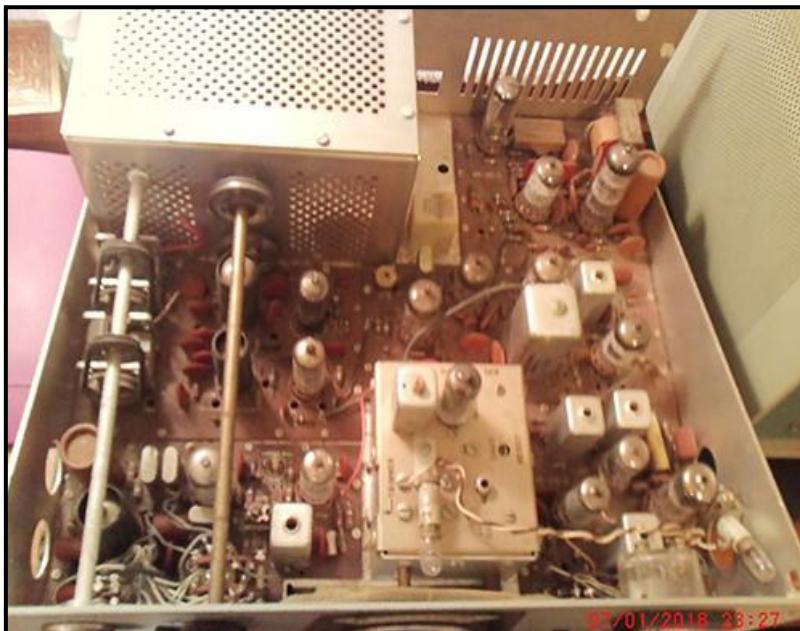


Photo 3 Heathkit HW-100, 40 years of grime, but in good condition



Photo 4: Heathkit HW-101 cleaned up

Finally, it is essential to limit your expectations: these are old radios and will likely have "quirks" that you may not be able to resolve. But, usually, these things are not too much of a problem when using the radios. I find that using a boat anchor is like driving around in an old car—it is not only fun, but it can be a headache at times. Still, though, others you'll speak with on the air are often fascinated to hear it is an antique you are using and will ask about the equipment. And the best part of all of this? I believe that it's the fact that you put that old radio back into service.

NOTE: Will Everett (N5OLA) has become a recognized Heathkit HW-101 transceiver "restoration guy" and posted a video on YouTube showing what he does. Look it over, as it will give the viewer a clear idea of a typical restoration: <https://www.youtube.com/watch?v=JeH9a6lEhGQ&t=8>.

73,
Bill, W1FMX

THE FOX'S DEN

Fox Hunts - a Great Way for People of All Ages to Get Involved in Ham Radio!

Let's be honest: amateur radio is a pretty cool hobby that comes with all sorts of benefits that are bound to appeal to kids just as much as tossing a ball at a hoop, heading out to the woods for a little cabin time, or building an entire civilization from a gaming app on a smartphone. After all, hams are privy to one-on-one space chats with astronauts, get to Indiana Jones their way to remote locales, and get to build an array of equipment. Undeniably super-cool stuff that easily earns any kid total superhero status at any level of participation—or it would, that is, if they knew about it. Unfortunately, not all do, but fox hunting, also known as radio orienteering or amateur radio direction finding (ARDF), is one of the ways the amateur radio community is working to change that.

What is Fox Hunting?

Some of you with an affinity for fluffy-tailed creatures may be reading this with growing apprehension. Fret no longer. The foxes in this international sport are purely the allegorical kind, with no fluff at all. Instead, ham hunters who choose to participate go toe-to-toe to meet the challenge of becoming the first operator to find a series of low-powered, hidden transmitters operating on 2 or 80 meters before rushing to cross the finish line. Competitions take many forms, with some taking place on foot, by vehicle, or even, in the case of a fixed-transmitter location hunt, from the comfort of your own shack. Depending on the environment, participants may rely on the use of handheld directional antennas, a compass, a map, intellectual agility, and pure physical prowess to emerge victorious. You can even add the possibility of winning prizes if you're so inclined. And, in our experience, kids tend to be very inclined to like prizes, so if your contest involves kids, it might be wise to keep a few rewards handy.



Clubs Using Fox Hunting to Introduce Youth and Others to Ham Radio

The [Sangamon Valley Radio Club](#) (SVRC) out of Springfield, Illinois, was recently awarded a grant by Amateur Radio Digital Communications for radio orienteering activities. The grant will allow the SVRC to purchase transmitters, controllers, receivers, maps, and loads of other great items with the aim to introduce kids, outdoor enthusiasts, and the public to the awesomeness that is all things amateur radio. And SVRC is sharing the wealth. They will be holding several events with local groups like the Boy Scouts of America and Civil Air Patrol to train participants on the technical and outdoor skills needed to find those foxes. Plus, the SVRC wants to share their know-how and equipment requirements with other groups and individuals who are interested in the sport. They will be happy to connect with yours to make it happen—and if it's a youth-oriented group that can help grow amateur radio into a new generation, even better.

Can I Participate in Fox Hunting in a Competitive Setting?

Of course! Amateur radio operators of all ages can enter the annual Amateur Radio Direction Finding Championship to contend with fellow hams in a fox hunt of epic proportions. The contest is a multi-transmitter foot race that is held in exceedingly beautiful locales across the globe.

Continued on page 24

THE FOX'S DEN CONT'D

Fox Hunting done the HCRA way!

This year's event recently took place in Borovets, Bulgaria, and was a big enough deal that we feel it's deserving of a substantial write-up of its own, so stay tuned for more in-depth coverage of it here at a later date, along with the upcoming 22nd USA Radio Orienteering Championships that will take place later this month.

Some Gear That Can Help

In addition to letting you hunt down RFI, the DX Engineering [NOISELOOP Portable Receive Flag Antenna Kit](#) is a useful tool for HF fox hunting. Based on a design by Don Kirk, WD8DSB, this kit is a game changer for the direction finding of RFI on MF and HF frequencies—and it works a lot better than a tuned loop. The antenna features unidirectional and broadband capabilities and is portable to easily tote around. Plus, building it only takes an hour or two, requires only basic hand tools, and the kit includes everything you need, including fiberglass tubing for the frame and handle, a mounting plate, separate PC boards for the bifilar wound transformer and load resistor, antenna wire, a coaxial cable with male BNC connectors, and stainless steel hardware. DX Engineering also carries M2 antennas, yagis, and MFJ Step Attenuators to help you on your hunt.

Special Thanks to Author, Kim Klimas

More Articles Like This Can be Found at: <https://www.onallbands.com>

**((((ON ALL)))
BANDS**



ITEM'S FOR SALE & WANTED

Items For Sale, Trade or Wanted

FOR SALE!

ICOM IC-245 2-Meter Multi-Mode Transceiver with IC-3PA Power Supply



For Sale:

Comes with: Mic, Mounting Bracket, and PDF copy of owner's manual. Manual also available at: <https://www.icomjapan.com/support/manual/2750/>

I am listing this radio for a friend who is a former amateur. It was purchased by his father, and he would like it to go to someone who can use it.

The transceiver has been in storage since it was purchased new some years ago and is virtually unused. It has recently been tested on FM simplex and functions as it should. Output was measured at 15 watts.

The IC-245 is a 144–148 MHz FM transceiver, and with the attached SSB adapter, it provides FM, SSB, and CW operation over the entire 2-meter band. Complete specifications can be found in the owner's manual.

73,

George, KC1V ~ kc1v @ arrl dot net

Asking Price: \$100 plus shipping from Zip Code 03824. Local pickup is also available.

If interested, or have questions, please contact Peter at peterhal65@yahoo.com

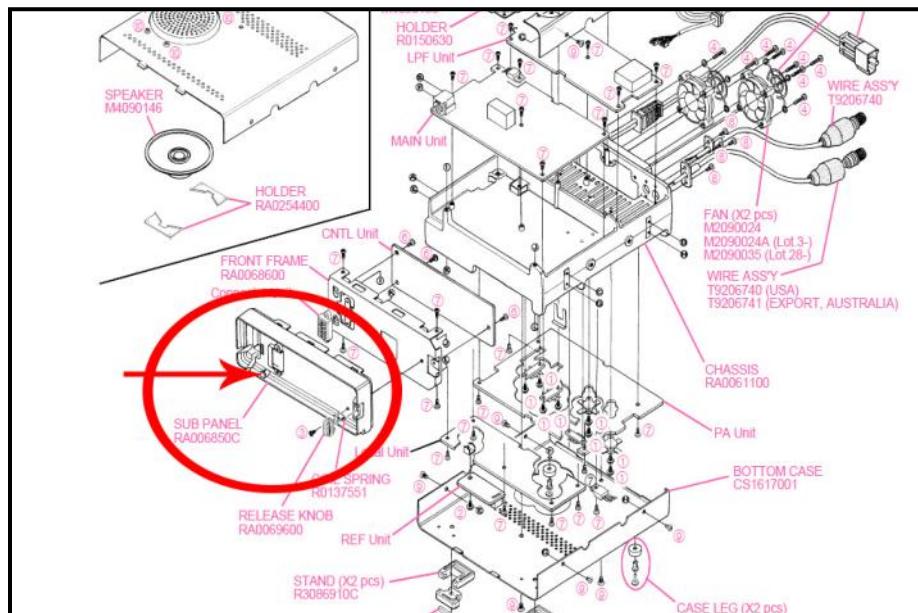
WANTED! Yaesu FT-100D Sub-Panel

I'm searching for a FT-100D or FT-100 sub-panel Yaesu part number RA006850C.

Recently, I had a mishap breaking the tabs that hold the faceplate to the main radio body. This was going to be my mobile HF radio.

If you have a dead FT-100/FT-100D that you will part with cheaply or for free, or if you have the sub-panel, please email me at kd1ku@arrl.net

73, Ken - KD1KU



VOLUNTEERS ON THE AIR UPDATE!

ARRL's VOTA Operating Event Continues!

It's a way for the league to recognize volunteers and create an operating event too. It is a way to encourage volunteers to make contacts with ARRL members and other volunteers. By submitting your log to LOTW and then a score is automatically figured out based on who you are and whom you spoke with.

ARRL's yearlong operating event, Volunteers On the Air, or VOTA, began January 1, 2023. The event is organized as part of ARRL's 2023 theme, "Year of the Volunteers," which recognizes the contributions of ARRL member volunteers, and offers opportunities to become more active and involved in amateur radio and ARRL.

VOTA encourages participants to make contacts with ARRL members and volunteers, earning points for each contact. Point values have been assigned (see the Points Table at vota.arrl.org). All scoring is automatically calculated through ARRL's Logbook of The World (LoTW, <https://www.arrl.org/logbook-of-the-world>). If you are already a LoTW user, continue uploading your QSOs to participate. If you're a new LoTW user, visit Getting Started with LoTW.

As part of the event, there will be week-long activations by W1AW portable stations operating in all US states and territories. W1AW/# portable operations are worth 5 points for each contact, and they can be contacted on all bands and modes. There's also an opportunity to earn the W1AW Worked All States Award. There will be two week-long W1AW operations from each of the 50 states.

Later in the event, an online scoreboard, the VOTA Leaderboard, will be activated, allowing each participant to see how their score measures up with other participants throughout the year.

Only two-way contacts qualify for points (cross-band, cross-mode, and repeater contacts are not valid), using any mode (CW, phone, or digital) - including EME and satellite operations - on 160, 80, 40, 20, 15, 10, 6, 2, and 1.25 meters, as well as 70 centimeters, VHF/UHF/SHF, and microwave bands available to US amateurs above 2 meters (2190-, 630-, 60-, 30-, 17-, and 12-meter band contacts are not counted for credit in this event).

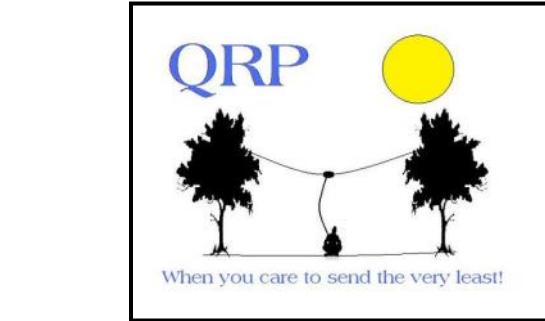
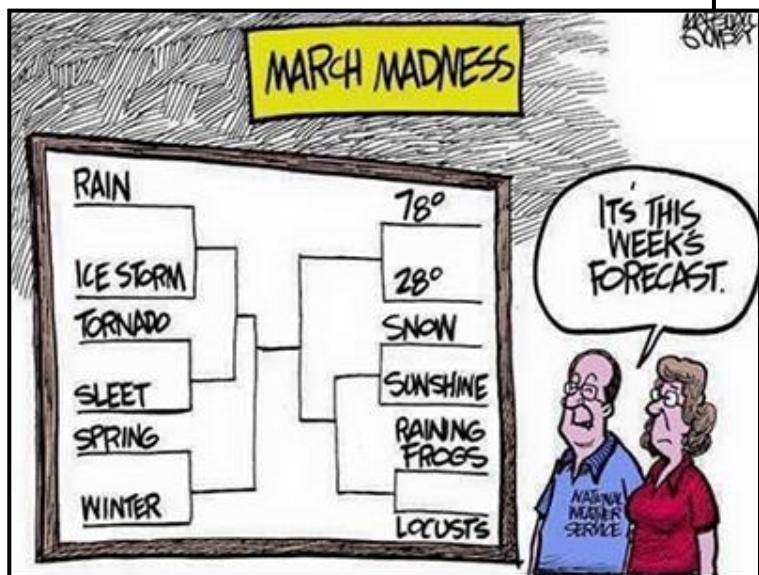
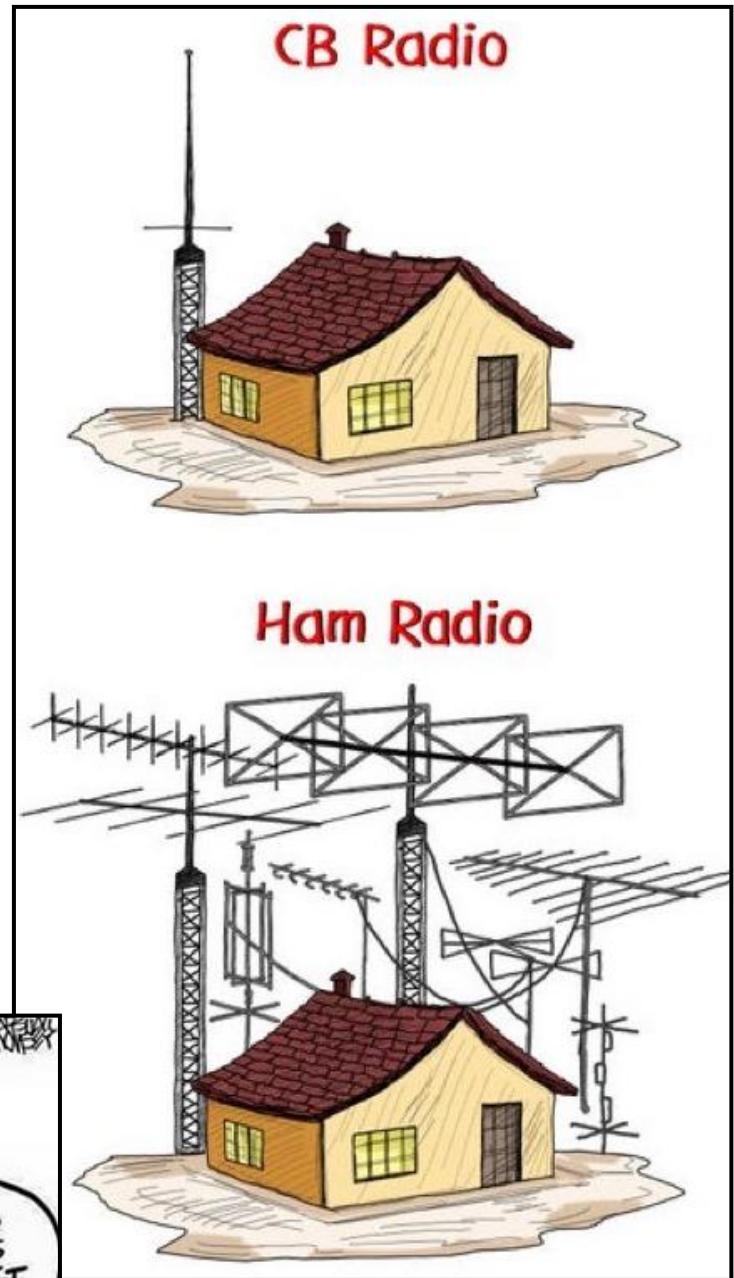
Larry, W1AST is the Massachusetts state coordinator, you can earn points by contacting each state as they will be on twice a year. **Don't forget you can work W1AW/1 between April 12th and 18th.** Every volunteer is given a point value as is every member. You can't add up your points if for example, Larry, a life ARRL member, field volunteer, affiliated club president. He will be assigned the highest point value for one of those and that's what working Larry is worth. Working Larry will give the maximum points below.

Any one who works Larry, W1AST will get 30 points as he is the WMA Affiliated Club Coordinator!

Would you like to be an activator for W1AW/1? If so, contact Larry, W1AST at w1ast@arrl.com to learn more. In the meantime, start working those other states. Each one is worth 5 points!

Learn more about VOTA at: <https://vota.arrl.org>





Clublog update: Clublog can be accessed at <https://clublog.org/league.php> Signup is free, and there are a number of ways to lookup information. Give it a try, who knows... you just might like it!

This is the latest HCRA Clublog for 2023 - you can see who has been on the air hot and heavy this year!
HCRA Clublog Information Updated on April 1st 2023



CLUBLOG
CLUBLOG

| <input type="radio"/> No Date Filter | <input checked="" type="radio"/> 2023 | <input type="radio"/> 2022 | <input type="radio"/> Last 12 months | | | | | | | | | | | | |
|--|---|----------------------------|--------------------------------------|----|-----|----|-----|----|-----|----|-----|---|--------|-------|--------|
| Filter by club/continent: | HCRA - Hampden County Radio Association | | | | | | | | | | | | | | |
| Generate DXCC League | | | | | | | | | | | | | | | |
| League for HCRA - Hampden County Radio Association | | | | | | | | | | | | | | | |
| Rank | Callsign | 160 | 80 | 60 | 40 | 30 | 20 | 17 | 15 | 12 | 10 | 6 | DXCC ▼ | Slots | Range |
| 1 | W1RM+1 | 25 | 54 | 0 | 113 | 11 | 133 | 23 | 140 | 60 | 153 | 1 | 219 | 713 | 60 yrs |
| 2 | NF1G | 0 | 7 | 0 | 9 | 41 | 83 | 50 | 82 | 73 | 85 | 0 | 195 | 430 | 39 yrs |
| 3 | KX1X | 2 | 36 | 5 | 85 | 63 | 91 | 32 | 113 | 71 | 113 | 1 | 167 | 612 | 26 yrs |
| 4 | KK1W+1 | 21 | 5 | 0 | 45 | 8 | 42 | 22 | 42 | 28 | 51 | 0 | 151 | 264 | 47 yrs |
| 5 | K1NZ+1 ★ | 19 | 23 | 12 | 12 | 66 | 75 | 60 | 57 | 86 | 89 | 0 | 150 | 499 | 12 yrs |
| 6 | W1AST+1 | 2 | 10 | 0 | 12 | 14 | 43 | 31 | 51 | 69 | 44 | 0 | 129 | 276 | 14 yrs |
| 7 | W1PY+1 | 0 | 4 | 0 | 38 | 0 | 47 | 2 | 94 | 5 | 86 | 0 | 124 | 276 | 13 yrs |
| 8 | WY1G | 0 | 7 | 0 | 18 | 0 | 3 | 1 | 10 | 53 | 69 | 1 | 106 | 162 | 42 yrs |
| 9 | N1FTP | 0 | 2 | 0 | 17 | 0 | 47 | 3 | 23 | 31 | 80 | 0 | 100 | 203 | 15 yrs |
| 10 | K1VOI | 0 | 16 | 0 | 34 | 18 | 47 | 7 | 51 | 8 | 40 | 0 | 90 | 221 | 22 yrs |
| | | 160 | 80 | 60 | 40 | 30 | 20 | 17 | 15 | 12 | 10 | 6 | | | |
| 11 | N1JIE | 1 | 2 | 1 | 5 | 8 | 14 | 9 | 16 | 9 | 20 | 0 | 43 | 85 | 6 yrs |
| 12 | N1TA+3 | 2 | 22 | 0 | 1 | 5 | 3 | 4 | 7 | 3 | 5 | 0 | 41 | 52 | 22 yrs |
| 13 | NV1Q+3 | 0 | 0 | 0 | 7 | 10 | 10 | 4 | 3 | 4 | 9 | 0 | 31 | 47 | 44 yrs |
| 14 | NE1C | 2 | 7 | 0 | 9 | 0 | 14 | 0 | 13 | 0 | 13 | 0 | 17 | 58 | 21 yrs |
| 15 | W1NU+2 | 1 | 0 | 0 | 9 | 1 | 3 | 1 | 0 | 0 | 2 | 0 | 14 | 17 | 8 yrs |
| 16 | W1JA+1 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 54 yrs |
| 17 | WD1S | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 11 yrs |

Do you know what Clublog is and what it can do for you?

If you have never used Clublog, need a refresher, or simply have the desire to learn as much as possible about Clublog or most anything else, go to the [HCRA YouTube Channel](#) and learn.

All meetings are recorded and posted on [hcra.org](#) plus video links are listed in Zero Beat. The link to the April 2021 meeting where Clublog was the topic of our guest speaker is listed below.

<https://www.youtube.com/watch?v=qj2lKcQRNbE&t=1s>

ARRL CLUB COMMISSION PROGRAM

Join or Renew your ARRL Membership threw the HCRA!

One benefit of being an ARRL Affiliated Club is that your club earns a commission for recruiting new ARRL members and for renewing members! Download the form, fill it out completely with payment (check only), and mail it to **Hampden County Radio Association, P.O. Box 562, Agawam, MA. 01001**

When joining or renewing your ARRL membership please download the form using the handy link below and send it to the HCRA P.O. Box above and NOT directly to the ARRL.

http://www.arrl.org/files/file/Clubs/2022_Affiliated_Club_Membership_Application.pdf

|  ARRL The National Association for Amateur Radio® | ARRL Affiliated Club Membership Application | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-----------------------|--------|---------|---------|--------|---------------|-------|------|------|------------------------------|-------|------|------|---------------------------------|-------|-------|------|-------|------|------|------|--------|------|------|------|---------|--|--|------|
| <input type="checkbox"/> I am a brand-new member, or my membership lapsed for 2 or more years. My club will receive a \$15 commission. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> I am renewing (includes lapsed members of less than 2 years). My club will receive a \$5.00 commission. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name _____ | | Call Sign _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Address _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| City _____ | | State _____ ZIP _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Email _____ | | Phone _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date of Birth ____ / ____ / ____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> My Family Member is Joining or Renewing: (Annually \$10 per member) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Your Annual Membership Dues - Circle Your Choice | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"><thead><tr><th></th><th>3 Years</th><th>2 Years</th><th>1 Year</th></tr></thead><tbody><tr><td>US Membership</td><td>\$140</td><td>\$95</td><td>\$49</td></tr><tr><td>International (Digital Only)</td><td>\$140</td><td>\$95</td><td>\$49</td></tr><tr><td>International (with mailed QST)</td><td>\$217</td><td>\$147</td><td>\$76</td></tr><tr><td>Blind</td><td>\$30</td><td>\$20</td><td>\$10</td></tr><tr><td>Family</td><td>\$30</td><td>\$20</td><td>\$10</td></tr><tr><td>Student</td><td></td><td></td><td>\$25</td></tr></tbody></table> | | | | 3 Years | 2 Years | 1 Year | US Membership | \$140 | \$95 | \$49 | International (Digital Only) | \$140 | \$95 | \$49 | International (with mailed QST) | \$217 | \$147 | \$76 | Blind | \$30 | \$20 | \$10 | Family | \$30 | \$20 | \$10 | Student | | | \$25 |
| | 3 Years | 2 Years | 1 Year | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| US Membership | \$140 | \$95 | \$49 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| International (Digital Only) | \$140 | \$95 | \$49 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| International (with mailed QST) | \$217 | \$147 | \$76 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blind | \$30 | \$20 | \$10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Family | \$30 | \$20 | \$10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Student | | | \$25 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL \$ <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Choose your print magazine - Check One | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> QST , ARRL's membership journal for active radio amateurs (12 monthly issues) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> On the Air , Beginner-to-intermediate-level help and advice (6 bimonthly issues) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Digital Only (All members can access the digital versions of both magazines) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Payment Enclosed is my: <input type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Charge Request Charge to my: <input type="checkbox"/> Visa <input type="checkbox"/> Mastercard <input type="checkbox"/> Amex <input type="checkbox"/> Discover Card Number _____ Expiration Date _____ Card Holders Signature _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toll Free (US) 1-888-277-5289 or 860-594-0200 • ARRL, 225 Main St., Newington, CT 06111-1400 membership@arrl.org • www.arrl.org/join | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

HCRA Needs Your Memories!

Do you have any memories of past HCRA events, club activities, or simply club history? Anything is great, but the older the better! Your Board of Directors needs any info no matter how insignificant you may think it is. We would rather have too much info than not enough. This is part of HCRA's 75th anniversary!

If you have anything to submit contact your Vice President, Ez, W1AEZ, at ez.w1aez@gmail.com

Outgoing QSL Cards to the Bureau

For those HCRA members who may wish to send Outgoing QSL Cards through the bureau. Paul, NF1G, who's next target date for mailing QSL cards to Newington is on April 15th. This is a service HCRA gives to its members. You MUST be a current HCRA and ARRL member.

Contact Paul, NF1G at nf1g@arrl.net to arrange drop-off / pickup. All instructions how to submit can be found on <http://www.hcra.org/dx-qsl/>

Contests and Special Event Stations

ARRL Contest Search - <http://www.arrl.org/contest-calendar>

Rookie Roundup SSB | April 16th | 80meters thru 10meters | Sunday 1800z - 2359z

For rules and additional information go to: <http://www.arrl.org/rookie-roundup>

10-10 QSO Party, Digital | April 29th - 30th | 28Mhz | Sat 0001z to Sun 2359z

For info: <https://www.ten-ten.org/index.php/activity/2013-07-22-20-26-48/qso-party-rules>

Special Event Station Search - <http://www.arrl.org/special-event-stations>

Venice Shark's Tooth Festival SES | April 22-23, 1400z-1900z | K4S

For all SES details: <https://www.venicesharkstoothfestival.com/>

HCRA Member Outgoing QSL Service

QSL's will be sent to the ARRL Outgoing QSL Bureau quarterly on the following approximate dates

April 15th, June 15th, Sept 15th, and January 15th, 2024

Go to <http://www.hcra.org/dx-qsl/> for complete information

or

Contact Paul, NF1G at nf1g@arrl.net





HCRA STUFF

HCRA is an ARRL Special Service Club



Join Brown Baggers for Lunch

For the benefit of all HCRA members Brown Baggers is a friendly lunch get together that happens on the 1st and 3rd Wednesday of each month. It is held at [The Munich Haus Restaurant](#) in Chicopee Center at 12:00pm (Noon). Located at 13 Center St, Chicopee, MA. Across from City Hall or click the link above.

Enjoy lunch, conversation and camaraderie with your fellow hams. Everyone is welcome!

10 Meter Net

The HCRA 10 meter net is been going strong as of this writing. Every Monday evening at 7 pm local. Gary, KC1JZR is NCS of this fun net! This is a great way for our newest HCRA members with a Tech or greater license to get some valuable time on HF. Everyone is welcome to join in on 28.375 USB regardless of affiliation. Have any questions? Contact: kd1ku@arrl.net

Please take part in this fun rag-chew style of net every Monday at 7pm on 28.375 usb

Share the Knowledge Zoom Meetings

Share the Knowledge Zoom meetings are nearly completed at the time this was written. This winter and spring have seen excellent STK meetings! Check out all of the STK videos on [hcra.org](#) and YouTube by clicking <http://www.hcra.org/category/videos/>.

If you have an idea for a STK meeting or maybe you'd like to give a presentation, for more details contact Larry, W1AST, at w1ast@arrl.net

Membership Memorial Page

All members now have the opportunity to honor club member SK's on the new Memorial page on hcra.org. This can be done by sending in the SK member's name and callsign along with any text, stories, and can include photos. Send them to our webmaster, Vanessa, W1IRL at the following email address: webmaster@hcra.org

**Please check-out the HCRA You Tube Channel and while you're there don't forget to click subscribe!
I hope that many members are working on their short video's for the club's You Tube channel.
For more info see the April issue of Zero Beat. The YouTube Channel link is below.**

For Sale Items

There is a For-Sale section that is for HCRA members. Any members who have a want, something to sell, or even an item to trade.

Send item description and photo(s) to:

kd1ku@arrl.net

HCRA Social Media Links

You Tube: <https://www.youtube.com/HampdenCountyRA>

Facebook: <https://www.facebook.com/groups/HampdenCountyRA>

NOTE: Twitter & IG accounts have been deleted with little use!



Local Nets & Happenings

Sundays: 8:45 am Western MA. VHF Emergency Net on 146.94, PL 127.3 W1TOM/R

Sundays: 9:15 am Western MA. UHF Emergency Net on 443.200, PL 127.3 W1TOM/R

1st Monday: 6:45 pm, MEMA RACES Drill, 146.49 Simplex and 3.930 LSB

Mondays: 7 pm, RACES Drill, 146.910, Mt. Greylock

Mondays: 7 pm, HCRA 10 Meter Net on 28.375, New topic every week. Have a topic to suggest? Contact kd1ku@arrl.net

Tuesdays: 7:30 pm, 146.94, PL 127.3 - Hampshire County Emergency Net

Tuesdays: 8 pm, ARES Emergency Net, on 146.985, PL 136.5

Wednesdays: 7:30 pm, MTARA Info Net on 146.94, PL 127.3

Wednesdays: MTARA Swap net: 146.94, Following Info Net

Wednesdays: N1RLX Simplex Net, Check-In's on 146.94 then QSY to 146.42 Simplex immediately following the swap net

Wednesdays: 9 am, FCARC Experimental Net, 28.354 MHz

Thursdays: 8 pm, FCARC Information Net, 146.985 - 136.5

Join or Renew Your ARRL Membership!

ARRL members enjoy:

- QST Magazine
- Members-Only Web Services
- Technical Information Service
- Member Discounts
- Outgoing QSL Service
- Continuing Education
- ARRL as an Advocate
- Regulatory Information Branch
- Public Relations for Amateur Radio
- ARRL Field Organization
- ARRL-sponsored contests
- Operating Awards
- Local Clubs
- Amateur Radio Emergency Service
- Hamfests and Conventions
- Volunteer Examiner Coordinator Program



<http://www.arrl.org/membership>

Club Meetings and VE Sessions

1st Friday of the month at 7:30 pm HCRA Meeting.

In-Person meetings began in Sept. 2022. Meetings start with a meet & greet at 7 pm followed by the regular meeting at 7:30pm sharp. <http://www.hcra.org/>

2nd Monday of the month at 7 pm, FCARC meeting.

1 Aviation Way, Turners Falls, MA. (airport). Social Hour 6-7 pm, meeting at 7 pm. <http://www.fcarc.org/>

2nd Saturday prior to FCARC meeting. 8 am Breakfast at

Denny's Pantry, 496 Bernardston Rd. Greenfield, MA.

Brad Councilman bc@councilman.com

3rd Friday of the month, MTARA Meeting, 7 pm, Castle

Of Knights, 1599 Memorial Drive, Chicopee, MA, 01020

<https://mtara.org/>

4th Friday of the month, The Western Mass VE Team

(WMVET) VE sessions at the Holyoke Hospital Auxiliary Room beginning January 27th and every 4th Friday at 6pm to perform VE exams. E-mail Dave, W1FAB wa1dc@yahoo.com. Call or text 413-575-2950. Need directions? <http://www.hcra.org/meeting-location/>

President - Larry Krainson, W1AST

w1ast@arrl.net

Vice-President - Ez Moralez, W1AEZ

ez.w1aez@gmail.com

Treasurer - George Collins, KC1V

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Secretary - Paul Kelliher, NF1G

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WB1Z trustee, Vanessa, W1IRL

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Hampden County Radio Association's 75th Anniversary!

1948 ~ 2023



**Here is your Fabulous Issue of
Zero Beat!**

**Plenty to Read in Our Special 75th
Anniversary Edition**

**Hampden County Radio Association
P.O. Box 562
Agawam, MA 01030-0562**